

ENVIRONMENTAL ASSESSMENT

for

**Hand Pile Burning  
For Hazard Fuel Reduction**

**EA# OR 110-01-028**

U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
MEDFORD DISTRICT  
GLENDALE RESOURCE AREA

*June 2001*

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
MEDFORD DISTRICT

EA COVER SHEET

RESOURCE AREA: Glendale FY & REPORT: # EA OR 110-01-028

ACTION/TITLE: Hand Pile Burning For Hazard Fuel Reduction

LOCATION: Locations throughout the Glendale Resource Area

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GLENDALE RESOURCE AREA  
ENVIRONMENTAL ASSESSMENT  
**HAND PILING BURNING FOR HAZARD FUEL REDUCTION**

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## **Chapter 1**

### **Purpose and Need For Action**

#### **A. Introduction, Purpose and Need for Action**

##### **1. Introduction**

The Hand Piling Burning for Hazard Fuel Reduction project would treat created fuel concentrations scattered throughout the Glendale Resource Area of the Medford Bureau of Land Management. Burning of the piles would be done in the fall/winter season after significant rainfall has occurred. Work is expected to begin the fall of 2001.

##### **2. Purpose and Need for Proposal**

The Glendale Resource Area (GLRA) annually conducts a large young stand management program throughout the Resource Area. This includes brushing and pre-commercial thinning with associated maintenance brushing. These actions create slash with a consequent increase of fire hazard. Wild land fire risk and hazard assessment surveys are conducted after the silvicultural treatments are completed. The assessments are the basis for determining where treatments are needed and most appropriate to reduce the fuel hazard and potential impacts of a wild land fire. Additionally the GLRA conducts brushing projects along road systems throughout the resource area. These projects are implemented in order to mitigate over growth of vegetation to these roads and maintain travel routes for private land owners, private industry landowners and BLM operations. These actions also create levels of slash that have commonly been left to deteriorate through time but increase the fire hazard.

The purpose of the proposed treatment would be to reduce the fire and fuel hazard created by these various silviculture and engineering practices by reducing fuel loadings throughout an entire unit at strategic locations in a unit (e.g., road sides, ridgetops and along property boundaries adjacent to private land) and road systems determined as major travel routes. Wild land fire hazard would be reduced on sites (units and roads) where slash has recently been created and hand piled. A further reduction in the fire hazard will occur when ignition of the hand piles is completed. Reduction in fuel load would decrease wild land fire intensity, flame length, and rate of spread if a wildfire occurs. These changes in wild land fire behavior reduce the resistance to wild land fire control efforts. Fire suppression forces will have more time to detect and respond to a slower moving fire. The potential for effective direct attack on the fire is greater when the fire is less intense, slower moving, and has lower flame lengths. Roadside brushing would be used along high use roads to reduce the risk of wild fire. Additionally this would generate a defensible space for fire suppression efforts in the event a wild land fire should occur.

Maintenance (re-treatments) of roadside hazard reduction areas identified would likely be necessary 3 to 5 years after initial treatment. This would occur less frequently as canopies develop and shade out brush species and enhance conifer and hardwood regeneration.

The purpose of this environmental assessment (EA) is to assist in the decision-making process by assessing the environmental and human affects resulting from implementing the proposed project or alternative. The EA would also assist in determining if an environmental impact statement (EIS) needs to be prepared or if a finding of no significant impact (FONSI) is appropriate.

This EA tiers to the following documents :

- (1) the Final EIS and Record of Decision (ROD) dated June 1995 for the Medford District Resource Management Plan dated October 1994;
- (2) the Final Supplemental EIS on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl dated February 1994;
- (3) the Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl and its Attachment A entitled the Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl dated April 13, 1994.
- (4) Record of Decision and Standards and Guidelines Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines dated January 2001.

## **B. Project Location and Land Use Allocations**

Project locations are scattered throughout the GLRA. Table 1 (Appendix A) lists the individual units proposed for fuel and hazard reduction treatment and features of each unit. Table 2 (Appendix B) lists road areas proposed for fuel and hazard reduction treatment. Units map is located in Appendix C. Road System Maps are located in Appendix D. Treatment areas are located in the Matrix, LSR, and Riparian Reserve land allocations.

## **C. Scoping Issues Relevant to the Proposal**

Several issues of potential concern were raised during the scoping phase of project planning. They are:

1. Air quality concerns and the requirements of the Oregon Smoke Management Plan (OSMP).
2. The proximity of the portions of the GLRA to the OSMP designated non-attainment areas of Grants Pass and Medford.
3. Potential for escaped fires as a result of pile burning.
4. Potential impacts to Special Status, Survey and Manage, and T&E species.
5. Potential impacts to some Riparian Reserves and water quality.

## **Chapter 2**

### **Description of Alternatives**

#### **A. Proposed Action and Alternatives**

##### **1. Alternative Action 1: The No Action Alternative**

In this EA document the "no-action" alternative is defined as not implementing any aspect of the proposed action alternative. Defined this way, the no action alternative also serves as a baseline or reference point for evaluating the environmental effects of the action alternative. Inclusion of this alternative is done without regard whether or not it is consistent with the Medford District RMP.

The no action alternative is not a "static" alternative. Implicit in it is a continuation of the environmental conditions and trends that currently exist in the project areas. This includes trends such as vegetation succession and consequent wildlife habitat changes, and an increase in fire hazard..

##### **2. Alternative Action 2: Proposed Action**

All pre-commercial thinning and brushing units listed in Table 1 (Appendix A) would receive post treatment hazard and risk determination surveys after the silvicultural treatment is completed. Units or portions of units determined to need hazard reduction treatment will have the slash hand piled and the piles burned. Prioritization for treatment is based on hazard and risk assessment worksheets and available funding. Factors that influence priority include strategic hazard reduction, distribution and location to private lands and other land management projects. When only portions of a unit or stand are to be treated, the areas selected for hazard reduction treatment are at critical points on the sites such as where the highest potential loss would be experienced if a wildfire occurred, or along areas where a high risk of an ignition source would be present (e.g., along heavily used roads). The actual extent of slash treatment will be dependant on available funding.

Treatment along identified roads would be to reduce fuel loading generated by brushing. The roadside treatment areas identified would be broken up into 20 acre sections, labeled, and ignited as units (these areas will be identified as units throughout the remaining content of this document). The extraction of commercial products is not the intent of this project. There would be opportunities for fire wood cutting to the public along these road systems prior to piling and burning. Wood cutting would only be allowed on the material generated from brushing.

#### **B. Project Design Features**

Project design features (PDFs) are included for the purpose of reducing anticipated adverse environmental impacts identified in the scoping process and which might stem from the implementation of the proposed action. This section outlines these PDFs.

## **1. Air Quality / Smoke Management**

To conform with air quality standards and guidelines, all prescribed burning would be managed in a manner consistent with the requirements of the Oregon Smoke Management Plan and the Department of Environmental Quality's Air Quality and Visibility Protection Program. When burn units are adjacent to rural residential areas burning would be timed to produce the least amount of residual smoke possible. This can be accomplished by burning when conditions for smoke dispersal are optimal such as during rainy days and periods when atmospheric instability is present.

Patrol and mop-up of burned piles would occur when needed to prevent burned areas from rekindling and potentially becoming an escaped fire.

## **2. Fire and Fuels**

Hand pile slash greater than 2' long and less than 7" diameter. Chainsaws may be utilized to reduce the size of the slash to sizes appropriate for hand piling. Maximum pile size would be approximately 5' in diameter by 6' in height. All piles would be covered with a 5' x 5' sheet of 4-mil polyethylene plastic. At least 3/4 of the piles surface would be covered and the plastic anchored to preserve a dry ignition point. Slash piles would not be constructed on logs, stumps, talus slopes, or within 25' to wildlife trees with nest structures, in roadways or drainage ditches. Piles would not be closer than 10' to reserved trees, or 25' to a unit boundary.

Ignition of piles would be with drip torches or other hand held devices. Burning would be done in the fall/winter season after significant rainfall has occurred. Significant rainfall amounts would be one inch(1") in a 48 hour period, or a cumulative amount that wets the litter and duff layer and penetrates the mineral soil layer to 1/4 inch or more. These conditions would typically prevent the spread of fire outside the burning pile and minimize the risk of an escape. A prescribed burn plan would be prepared to address burning objectives and operational concerns. Piles would be ignited except those within a designated no treatment zone of a riparian reserve or S&M, T&E buffers.

## **3. Special Status Species and Cultural Resources**

Cultural resource surveys, surveys for special status plant and animal species and/or species of concern will be conducted prior to the initiation of the silviculture treatments and on the roads identified in this document. Measures appropriate to protect cultural sites and/or species will be taken. These could include: timing of treatment, buffering of areas to preclude treatment, or no treatment of the area.

To the extent possible, piles would not be located in areas of unsurveyed Del Norte salamander habitat or talus areas known to be occupied by the Del Norte salamander. Piles located in these areas would not be ignited.

In habitat areas reserved for red tree vole populations, no slash pile burning shall occur within 25' of known nest sites identified from surveys.



During periods of high temperatures and low ground moisture conditions, mollusc may seek out covered piles as refugia. To reduce potential impacts to molluscs and mollusc habitat, hand piles would be created away from talus, rock structures, coarse woody debris, and pile burning would be done when temperatures and ground moisture conditions are conducive to mollusc dispersal away from covered piles.

Surveys will occur for vascular plants, lichens, and bryophytes. Populations of Special Status, Threatened or Endangered, or Survey and Manage Plants will be buffered by about 100 feet. Pile burning will not occur within these areas.

#### **4. Remnant Habitat for Fungi and Bryophytes**

As part of this prescription, special treatment guidelines for mature and old growth trees providing remnant habitat for fungi and bryophytes would be applied. No hand piling or hand pile burning would occur within the drip-line of remnant trees (all land allocations).

#### **5. Riparian Reserve Treatment**

The presence of streams in the proposed treatment units are indicated on Table 1 (Appendix A) and on unit maps in Appendix B. Riparian reserve widths are those of the Northwest Forest Plan:

*Fish-bearing streams* - 300 feet or 2 site potential tree heights from the edge of the stream (slope distance).

*Permanently flowing non-fish-bearing streams* - 150 feet or 1 site potential tree slope distance from the edge of the stream.

*Seasonally flowing or intermittent streams* - 100 feet slope or 1 site potential tree distance from the edge of the stream channel.

*Lakes and natural ponds* - 300 feet or 2 site potential trees slope distance from the outer edge of the body of water.

*Constructed ponds and reservoirs and wetlands greater than one acre* - 150 feet slope distance from the outer edge of the body of water or wetland.

Slash piling and burning would be done within the riparian reserves except as follows. For *Fish-bearing streams* a 50' no treatment buffer would be retained adjacent to the stream. A 25' no treatment buffer would be retained along *Permanently flowing non-fish-bearing*, *Seasonally flowing or intermittent streams* and other riparian areas. These buffers would extend from the edge of the riparian vegetation or, if no riparian vegetation exists, from the edge of the stream channel and would be delineated during project implementation.

Due to differences in vegetation and silvicultural treatment, pile density in riparian reserves is typically 5 to 10% lower than the upland areas. The amount of slash generated may necessitate placing a hand pile within a no treatment zone area in order to remove the fuel up to the no treatment zone line. Hand piles within riparian reserves would be ignited, except those within the no treatment zones.

## 6. Seasonal Operation Constraints

Seasonal operating constraints would be per Biological Opinion #1-7-96-F-392 for BLM silviculture projects 1996 through 2005 and the RMP:

*Spotted Owls* - No work involving chainsaws would be permitted within 0.25-mile of an known active spotted owl nest or activity center between March 1 and June 15, or until the action agency biologist determines that the owls are non-nesting, no young are present, or juveniles have sufficiently dispersed. Units with this characteristic are indicated on Table 1. (Note: The spotted owl related operating season is less restrictive than that required in the RMP, however, the fact that it is specifically approved by the USFWS supports it being treated as a permissible exception.)

*Marbled Murrelet* - In Zones A and B, disturbing activities within 0.25-mile of known occupied marbled murrelet sites, or unsurveyed suitable marbled murrelet habitat, are restricted from April 1 - August 5. Daily restrictions apply August 6 - September 15, from 2 hours before sunset to 2 hours after sunrise.

In Zone C, work involving chainsaws would be permitted within 0.25-mile of known occupied marbled murrelet sites, or unsurveyed suitable marbled murrelet habitat, no earlier than two hours after sunrise and no later than two hours before sunset from April 1 - August 5.

In Zone D, no restrictions.

*Bald Eagle* - Work activities within 1/4 mile non line-of-sight or 1/2 mile line-of-sight of active bald eagle nests would be restricted to between January 1 - August 1.

*Peregrine falcons* - Avoid disturbance to pairs between February 1 - August 1 (RMP).

*Other raptors* - Between March 1 and July 15 and within 1/4 mile of nest sites or activity centers, no disturbances that may disturb or interfere with nesting (RMP).

## **Chapter 3**

### **Environmental Consequences**

#### **A. Introduction**

Only substantive site-specific environmental changes that would result from implementing the proposed action or alternatives are discussed in this chapter. If an ecological component is not discussed, it should be assumed that the resource specialists have considered affects to that component and found the proposed action or alternatives would have minimal or no affects. Similarly, unless addressed specifically, the following were found not to be affected by the proposed action or alternatives: air quality; areas of critical environmental concern (ACEC); cultural or historical resources; Native American religious sites; prime or unique farmlands; floodplains; endangered, threatened or sensitive plant, animal or fish species; water quality; wetlands/riparian zones; wild and scenic rivers; and wilderness areas. In addition, hazardous waste or materials are not directly involved in the proposed action or alternatives.

#### **B. Effects of the Proposed Action**

##### **1. Soils and Water**

###### **a. Affected Environment**

Units proposed to be treated are distributed throughout the Glendale Resource Resource Area and most fifth field watersheds. Removal of fuels, hand piling, and burning will, for the most part, be done outside of designated no treatment zones (NTZ) within the riparian reserves. Occasionally a hand pile would occur within the NTZ but none of these piles would be burned. Proposed fuels treatments would occur in a variety of stand and vegetation types throughout the Glendale Resource Area. Geology, soils and vegetation communities are quite variable from west to east. Since this is the case it is difficult to describe each and every unit. Watershed Analysis documents for each of these major watersheds are available for a more in depth coverage of the environment. The majority of the fuels hazard reduction activities would occur in silviculture treatment units. Several thousand acres per year are treated (brushing/ PCT ). The major travel routes (Appendix: D ) would receive treatment in areas having high amounts of ladder fuels and considered high priority due to risk and level of recreational travel.

###### **b. Environmental Consequences**

###### **1) Alternative 1: No Action**

The wildland fire hazard with added slash fuels would increase immediately following the slash treatments. With increased fire hazard would come increased likelihood of damaged soils from hot fire occurrences in the future. This would cause highly reduced organic matter content in the upper mineral soil and on the soil surface. This could have two consequences on soil and water quality:

a) Increased erosion and sedimentation. Sediment would reach class 3 and 4 streams and would reach fish streams in pulses depending precipitation rates following fire. As new

plant growth would slowly take place (see 2 below), sediment quantities to the stream system would diminish through the short term until approximately in 10 years sediment rates would return to current levels.

b) Due to loss of duff/litter layer and loss of the organic matter in the upper mineral soil as a source of nutrients, soil productivity would decrease substantially within these units.

## 2) Alternative 2: Proposed Action

Assuming a high average of 40 piles per acre with each pile covering 28 ft<sup>2</sup>, burned spots after piles are burned would cover less than three percent of the ground surface. Assuming that most of the burned piles will result in a spot on which soil has substantial reduction of organic matter, this would result in reduction of soil productivity for the individual spots. Since the burned spots will occupy less than 3% of the treated units the overall reduction of soil productivity rate will be minimal. Erosion/sedimentation should not be a factor as the spots would be islands surrounded by a matrix of vegetative cover.

A wildland fire would burn with less intensity than under the no action alternative. Any resultant increase in erosion/sedimentation would thus likely be far less than without the treatment. Also the resulting decrease in soil productivity would likely be far less than without the treatment.

At the 5<sup>th</sup> and 6<sup>th</sup> field watershed level, cumulative effects of the proposed treatment on additional stream sediment over background levels would be minimal and would not likely be measurable.

## 2. Fire and Fuels

Hazard is defined as the existence of a fuel complex that constitutes a threat of wild land fire ignitions, unacceptable fire behavior and severity, or suppression difficulty.

Fuels include dead and down woody debris, and live vegetation. Stands that are not or will not be at or near mature conditions within 20 year time frame are still more susceptible to stand replacement from wildland fire events due to conditions such as thin bark and high crown ratios.

### a. Environmental Consequences

#### 1) Alternative 1: No Action

The wildland fire hazard and fuel hazard would increase immediately following the slash treatments. Increased fire behavior intensities, flame lengths and rates of spread will result from the added fuel levels. The threat of increased fire behavior will continue to exist until the fines have fallen off and the remaining larger fuels have compacted. This may reduce rates of spread but increased wildland fire intensities and flame lengths will still exist.

#### 2) Alternative 2: Proposed Action

Wildland fire hazard will be reduced on sites where slash has recently been created and hand

piled. A further reduction in the fire hazard will occur when ignition of the hand piles is completed. Reduction in fuel load will decrease wildland fire intensity, flame length, and rate of spread if a wildfire occurs on the site. These changes in wildland fire behavior reduce the resistance to wildland fire control efforts. Fire suppression forces will have more time to detect and respond to a slower moving fire. The potential for effective direct attack on the fire is greater as the fire is less intense, slower moving, and has lower flame lengths.

### **3. Wildlife**

Although a range of species may utilize the areas proposed for slash treatment, the potential impacts are minimal. This discussion will focus on potential impacts on T&E and survey and manage species.

#### **a. Affected Environment**

The areas proposed for fuel reduction treatments include stands that are generally less than 30 years old. Stands less than 30 years old do not provide typical nesting, roosting, or foraging habitat for spotted owls, marbled murrelets, and bald eagles. Bald eagles and spotted owls may occasionally use young stands for foraging. This foraging is most likely associated with edges where adjacent large trees provide perching opportunities and cover.

There are no currently known bald eagle nests currently within 0.5 mile of the proposed treatment units. There are no currently known peregrine falcon nests within 0.5 mile of the proposed treatment units. There are no known marbled murrelet sites within 0.25 miles of the proposed treatment units.

The Del Norte salamander has been moved to Category D in the Survey and Manage SEIS ROD, and requires management for known sites only. Some project areas are expected to occur in or adjacent to occupied talus areas.

Blue-gray and papillose tail dropper slugs have been removed from the Survey and Manage list (S&M SEIS ROD). The Siskiyou shoulderband snail (*Helminthoglypta hertleini*) is a dry site associated species, and utilizes rock structures and CWD. Key habitat features used by the survey and manage species, and molluscs and salamanders in general, would be avoided (CWD, talus and rock structures, large deciduous trees). The fuels reduction procedures are expected to occur in some dry site areas that may be inhabited by the Siskiyou shoulderband snail, and have only minimal impacts to survey and manage species.

#### **b. Environmental Consequences**

##### **1) Alternative 1: No Action**

For some species, particularly small mammals, large quantities of slash may provide hiding cover. However, large quantities of untreated slash may also create obstacles to the movement of some terrestrial species and impediments to the foraging efficiency of some raptors.

The greatest concern is the increased risk of stand destroying fires associated with high fuel loading. As long as fuel levels remain high, the risk of stands being set back to earlier seral stages remains elevated and the ability to effectively manage for mature forests and associated wildlife species is greatly compromised.

For spotted owls, no impacts to suitable foraging habitat are anticipated as a result of the No Action alternative. This is based primarily on the fact that foraging by spotted owls in 15 - 30 year old stands is typically confined to the edges. The greatest risk is associated with increased fire hazard.

For marbled murrelets, young stands do not provide suitable nesting habitat. Additionally, the areas proposed for fuel reduction treatments are within the marbled murrelet zone 1 and zone 2, but are within a basin where there have been no murrelet detections and the probability of them occurring is considered very low. Based on this, there are no anticipated impacts to the marbled murrelet.

For bald eagles, there are no known nests within ½ mile of the proposed activities. Additionally, these young stands do not provide preferred foraging habitat. Based on this, there are no anticipated impacts to the bald eagle. The greatest risk is associated with increased fire hazard.

For Del Norte salamanders, survey and manage molluscs, and red tree voles, there are no anticipated direct impacts associated with the No Action alternative. The greatest risk is associated with increased fire hazard.

## 2) Alternative 2: Proposed Action

In general, reducing fuel levels would remove habitat for smaller wildlife species strongly associated with this type of ground cover. Because not all slash piles are entirely burned and not all slash is removed, some of the ground cover benefits provided by slash would remain intact. Estimates are that 5-15% of the targeted fuels will not be consumed. Overall, the greatest benefit associated with fuel reduction is the ability to more effectively manage stands to achieve mature forest conditions.

For spotted owls, fuel reduction will not have broad implications for the suitability of foraging habitat. This is based primarily on the fact that spotted owls typically confine foraging to the edge of young stands. Restricting the operation of power equipment within 1/4 mile of nest sites or activity centers of all known pairs and resident singles between March 1 - June 15 will minimize potential disturbance. Reducing fuel levels will enhance the long term ability to manage critical owl habitat and LSR areas for mature forest conditions, and aid in the recovery of T&E species using these areas.

For marbled murrelets, young stands do not provide suitable nesting habitat. Additionally, the areas proposed for fuel reduction treatments are outside of the known range for marbled murrelets. Based on this, fuel reductions are not anticipated to result in impacts to the marbled murrelet.

For bald eagles, there are no known nests within ½ mile of the proposed activities. Additionally, these young stands do not provide preferred foraging habitat. Based on this, there are no anticipated direct impacts to the bald eagle. Reducing fuel levels will enhance the long term ability to manage these areas for mature forest conditions.

For Del Norte salamanders, survey and manage molluscs, and red tree voles, there are no anticipated direct impacts. Key habitat features and nest trees will be avoided, and no suitable habitat removed. Reducing fuel levels will enhance the long term ability to manage these areas for mature forest conditions.

#### **4. Fisheries**

##### **a. Affected Environment**

Most of the units proposed for treatment do not contain Riparian Reserves. Most of the Riparian Reserves that are in the proposed treatment units are intermittent streams (Class 4) which are not used by fish. Several streams are perennial (Class 3) but are not used by fish. A few fish-bearing perennial streams (Class 1 and 2) are present within the proposed treatment units and support resident trout. Many of the intermittent streams in the project area are ephemeral and flow for only a short time each year. As a result, plants which are adapted to moist soil conditions may be present only within a few feet of the stream or not at all. Other intermittent streams and some perennial streams are in deep V-shaped channels with no floodplain, allowing riparian vegetation to grow only within a few feet of the stream. Outside of these narrow zones of riparian plants, the vegetation in the Riparian Reserve is similar to that which is found in the drier upland areas outside of the reserves. The natural stand condition in the areas outside the immediate riparian zone would be an open overstory and sparse understory dominated by fire-adapted species. Due to past logging practices and the exclusion of fire, forest stands in the project area are typically more dense and brushy than under natural conditions and have a higher fuel loading.

##### **b. Environmental Consequences**

###### **1) Alternative 1: No Action**

If no action is taken to hand pile and burn slash created by brushing and pre-commercial thinning, fuel loading in the Riparian Reserves will pose a greater wildfire hazard than if the proposed action of hand piling and burning slash is implemented. The risk of a stand-destroying fire would remain high in much of the Riparian Reserve acreage, including miles of streams which would be vulnerable to the effects of wildfire outside the normal range of intensity (see Soil and Water effects).

###### **2) Alternative 2: Proposed Action**

No adverse effects to fish or aquatic resources are anticipated from the proposed action. No burning of hand piles will take place within 25 feet of riparian vegetation on non-fish bearing streams and within 50 feet of riparian vegetation on fish-bearing streams. These no treatment buffers close to streams will be sufficient to protect streams from even the small erosion risk

associated with removal of the organic soil layer under burned hand piles. The spacing of hand piles to be burned outside the no treatment buffers but within the Riparian Reserve is sufficient to minimize the risk of sediment transport.

The short and long term effects of the proposed action are beneficial at the site and watershed levels, as wildfire hazard will be reduced in and around Riparian Reserves. No cumulative effects are anticipated from the proposed action as burning will be widely dispersed spatially at the site and watershed levels. In addition, it is unlikely that all of the proposed burning would take place within the same season, but will instead take place over a 2 to 3 year period.

## **5. Botany**

### **a. Affected Environment**

The early-successional units have very little native habitat remaining due to past timber management practices. Older stands are more likely to contain habitat for late-successional species, particularly Survey and Manage vascular plants, lichens and bryophytes. Some units are non-forest habitats, due to unfavorable soils; these units are particularly likely habitats for Special Status species and the listed endangered *Fritillaria gentneri*. All units will be surveyed for Special Status, Threatened or Endangered, or Survey and Manage vascular plants, lichens and bryophytes.

Small buffers (about 100') will be established around plant populations to protect the plants from direct disturbance from brushing, thinning and pile burning, and to protect immediate microclimate conditions.

### **b. Environmental Consequences**

#### **1) Alternative 1: No Action**

Under the No Action alternative, the fuel loadings would increase the wildfire risk for any late-successional plant species found in these units. High fuel loads could lead to catastrophic wildfire that could eliminate populations and any late-successional habitat that may occur. Conversely, wildfire may be neutral or beneficial for some fire-adapted plants.

#### **2) Alternative 2: Proposed Action**

The hand piling and burning of hand piles should reduce the threat of catastrophic fire to any late-successional plants found in these units, providing a possible beneficial effect. Buffers will provide protection to plant populations which could be impacted by pile burning and ground disturbance, and would protect interior forest microclimate. No effects are anticipated to Special Status, Threatened or Endangered, or Survey and Manage plants.



## Chapter 4 Agencies and Persons Consulted

### A. Public Involvement

No formal public scoping or involvement was held on this proposed project. Extensive discussions about the Resource area's prescribed burning program have been held with Oregon State Department of Forestry.

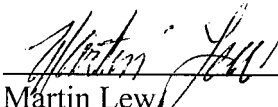
### B. Availability of Document and Comment Procedures

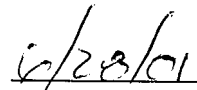
The EA will be available for a 15 day public review period in the BLM Medford District Office, on the Medford District's web site or by request.

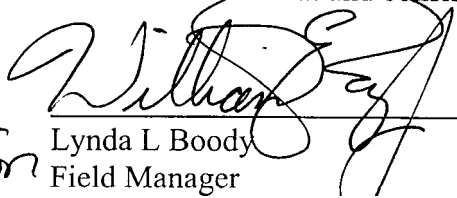
### C. Interdisciplinary Team Preparers

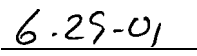
INTERDISCIPLINARY PREPARERS	TITLE	RESOURCE VALUES ASSIGNED
Larry Pingel *	Forestry Technician Fuels / Timber	Team Lead, Fire Risk/Hazard, Fuels Treatments, Forest Health
Tom McVey *	Fuels Management Specialist	Fire Risk/Hazard, Fuels Treatments, Forest Health
Marlin Pose *	Wildlife Biologist	Wildlife, Prime or Unique Lands
Loren Wittenberg *	Soil Hydrologist	Floodplains, Wetlands, Soils, Water
Douglas Goldenberg *	Botanist	Threatened & Endangered Plants
Robert Bessey	Fisheries Biologist	Fisheries
Randy Bryan	Engineer	Roads
Diane Parry		Cultural Resources
Doug Stewart *	Silviculturist	Prescription Writer

\* Project Planning Core Team Member

  
\_\_\_\_\_  
Martin Lew  
Natural Resource Specialist  
Reviewed for format and consistency

  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
for Lynda L Boody  
Field Manager  
Glendale Resource Area

  
\_\_\_\_\_  
Date

## APPENDIX A: Proposed Hazard Reduction Units

**TABLE 1: PROPOSED HAZARD REDUCTION UNITS**

Previous Silviculture Treatment	Year	Township Range	Section	Unit Name	Unit Acres	Riparian Reserve Identified	Wildlife Seasonal Restrictions	S&M, T&E Plant	Watershed Identified
	2000	31s4w	27	Whitehorse	15				Upper Cow Creek
	2000	31s4w	23	McShively Creek	12				Upper Cow Creek
	2000	31s4w	34	Galesville Return	13				Upper Cow Creek
	2000	31s4w	31	Russell Creek	9				Upper Cow Creek
	2000	31s4w	22,23	Cleanup East	17				Upper Cow Creek
	2001	33s6w	27	London Peak	22				Grave Creek
	2001	32s4w	9,10	Koehler Jones	24				Middle Cow Creek
	2001	32s4w	20,29	Koehler Jones	33				Middle Cow Creek
	2001	32s4w	17	Koehler Jones	8				Middle Cow Creek
	2001	32s5w	8,17	Fortune Return	30				Middle Cow Creek
	2001	32s5w	33	Quines Creek	33				Middle Cow Creek
	2001	32s5w	33	Quines Creek	34				Middle Cow Creek
	2001	32s5w	27	Bullwinkle	12				Middle Cow Creek
	2001	32s5w	27	Bullwinkle	39				Middle Cow Creek
	2001	33s6w	1	Swamp Creek	22				Grave Creek
	2001	33s7w	13	Rattlesnake Return	12				Middle Cow Creek
	2001	33s7w	26,27	Fall Creek	12				Grave Creek
	2001	34s7w	9	Centennial Ridge	43				Grave Creek
	2001	34s7w	7	Centennial Ridge	34				Grave Creek
	2000	34s7w	5	Centennial Ridge	42				Grave Creek
	2000	34s6w	23	Burgess Gulch	11				Grave Creek
	2000	34s6w	23	Burgess Gulch	5				Grave Creek
	2000	33s7w	29	RockCreek	16				Grave Creek
	2000	34s5w	3	Eastman Gulch	22				Grave Creek
	2000	34s6w	1	Salmon Creek	13				Grave Creek
	2001	32s4w	33	Starveout Creek	37				Middle Cow Creek
	2001	32s5w	5	Fortune Branch	19				Middle Cow Creek

**APPENDIX A: Proposed Hazard Reduction Units****TABLE 1: PROPOSED HAZARD REDUCTION UNITS**

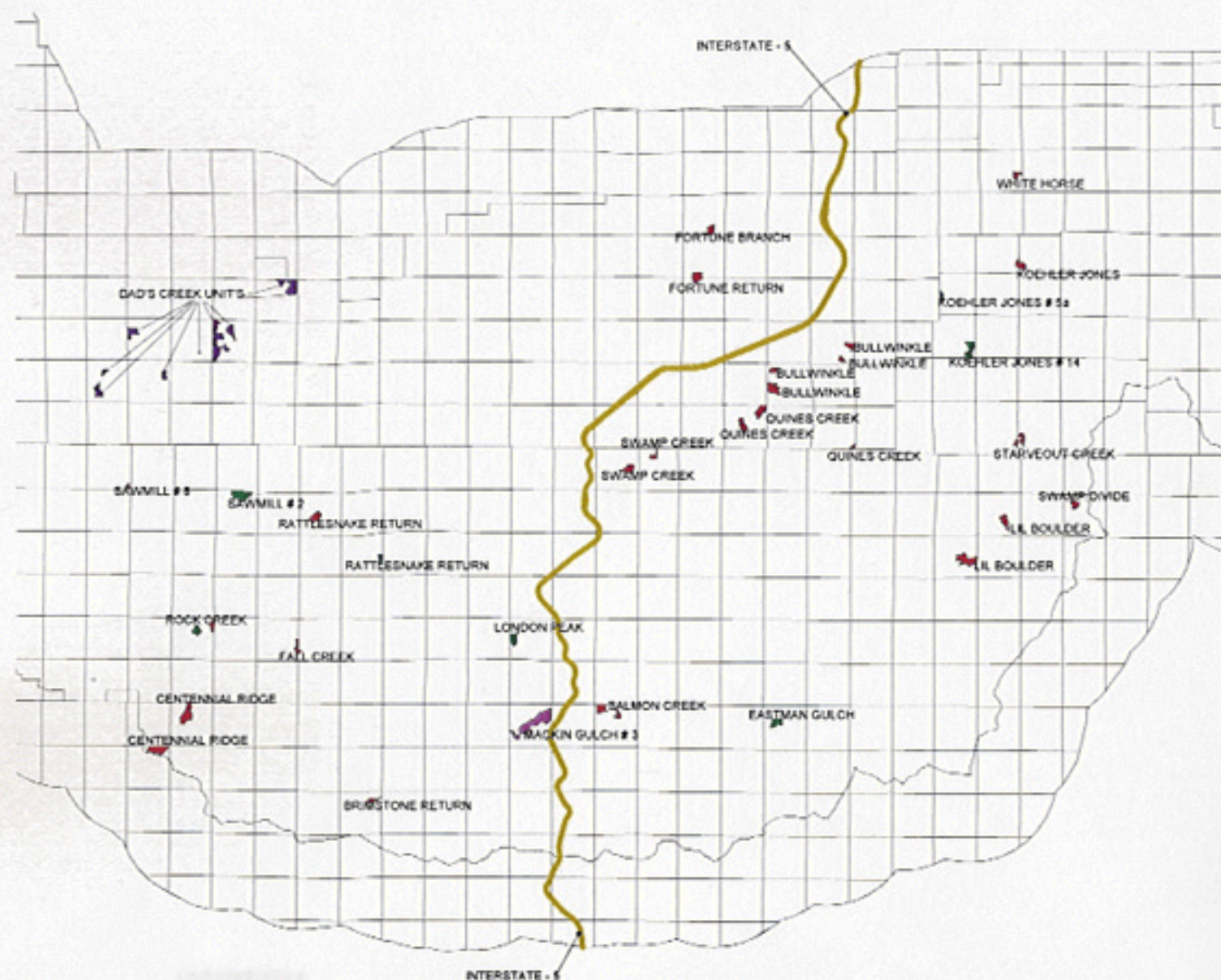
Previous Silviculture Treatment	Year	Township Range	Section	Unit Name	Unit Acres	Riparian Reserve Identified	Wildlife Seasonal Restrictions	S&M, T&E Plant	Watershed Identified
	2001	33s7w	29	RockCreek	11				Grave Creek
	2001	34s6w	1	Salmon Creek	25				Grave Creek
	2001	34s6w	3	Mackin Gulch	33				Grave Creek
	2001	33s4w	9	Lil' Boulder	25				Grave Creek
	2001	33s4w	11	Swamp Divide	14				Grave Creek
	2001	33s5w	6	Swamp Creek	12				Middle Cow Creek
	2001	34s7w	13	Brimestone Return	8				Grave Creek
	2001	32s5w	23	Bullwinkle	9				Middle Cow Creek
	2001	32s5w	23	Bullwinkle	20				Middle Cow Creek
	2001	33s7w	11	Rattlesnake Return	21				Middle Cow Creek
	2001	31s4w	33	Whitehorse	14				Middle Cow Creek
	2001	32s5w	35	Quines Creek	6				Middle Cow Creek
	2001	32s7w	15	Dads Creek	23				Middle Cow Creek
	2001	33s4w	17	Lil' Boulder	68				Grave Creek
	2001	33s7w	29	RockCreek	11				Grave Creek
	2001	34s6w	1	Salmon Creek	25				Grave Creek
	2001	34s6w	3	Mackin Gulch	33				Grave Creek
	2001	33s4w	9	Lil' Boulder	25				Grave Creek

APPENDIX B: Proposed Hazard Reduction Road Treatments

TABLE 2: PROPOSED HAZARD REDUCTION ROAD TREATMENTS

Previous Silviculture Treatment	Year	Township Range	Section	Road Area	Unit Acres	Riparian Reserve Identified	Wildlife Seasonal Restrictions	S&M, T&E Plant	Watershed Identified
				Bobby Access	187				
				Calvert Airstrip	99				
				Cow Creek Rd.	122				
				Coyote Creek	107				
				Elk Valley	92				
				Fortune Branch	66				
				Galesville	44				
				Rock Creek	687				
				Snow Creek	179				
				Starveout Creek	114				
				Upper Grave Creek	123				
				West Fork Cow Creek	190				

# GLENDALE RESOURCE AREA FUEL TREATMENT UNIT'S



- I-5
- Gc\_tr-units.shp
- Dad's CreekFuels-mgt.shp
- Dads CreekFuel-mgt.shp
- 2001\_treatment.shp
- 2002-03 Treatment'sLarrypct2.shp
- GI\_bndry\_2000
- GI\_sect2000

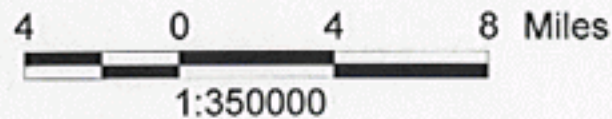


# Glendale Field Office Fuel Reduction Project Roads



Interstate 5

Interstate 5



- I-5.shp
- Hp\_road\_trt.shp
- BOBBY ACCESS
- CALVERT AIRSTRIP
- COW CR RD
- COYOTE CR
- ELK VALLEY
- FORTUNE BRANCH
- GALESVILLE
- ROCK CR
- SNOW CR
- STARVEOUT CR
- UPPER GRAVE CR
- WEST FK COW CR
- GImajor\_roads
- Township\_Range
- OWNERSHIP**
- MEDFORD DISTRICT
- SISKIYOU NF
- UMPQUA NF
- Sections
- GI\_boundary